Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on March 2, 2023 and includes data through February 27, 2023. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses.

	Milwaukee County	City of Milwaukee	Subui
Total primary vaccine doses administered	1,188,756	677,839	510,9
Pfizer	719,794	435,263	284,5
Pfizer Age 5-11	60,461	31,923	28,5
Pfizer Age 6M-4Y	10,807	4,416	6,
Moderna	356,530	182,845	173,
Moderna Age 6m-5Y	6,404	2,629	3,
Johnson & Johnson	34,760	20,763	13,
otal vaccine doses administered (including	1,767,348	969,677	797,
oosters) Pfizer	968,403	571,168	397,
Pfizer Age 5-11	966,403 66,149	34,249	397, 31,
Pfizer Age 5-11	10,852	4,446	6,
Pfizer Bivalent Booster	112,900	62,165	50
Moderna	505,956	249,441	256
Moderna Age 6M-5Y	6,450	2,644	3
Moderna Bivalent Booster	54,418	21,401	33
Johnson & Johnson	37,494	22,203	15
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Total individuals with one or more doses	634,582	365,613	268
Pfizer	372,300	226,727	145
Pfizer Age 5-11	32,187	17,468	14
Pfizer Age 6M-4Y	4,909	2,241	2
Moderna	184,115	95,158	88
Moderna Age 6M-5Y	3,575	1,510	2
Johnson & Johnson	34,654	20,697	13
Fotal individuals completely vaccinated	589,809	334,368	255
Pfizer	348,779	209,114	139
Pfizer Age 5-11	28,489	14,619	13
Pfizer Age 6M-4Y	2,213	710	1
Moderna	172,749	88,027	84
Moderna Age 6M-5Y	2,836	1,124	1
Johnson & Johnson	34,654	20,697	13,
Total individuals boosted	351,910	183,906	168,
Pfizer	208,412	114,415	93
Pfizer Age 5-11	10,013	4,247	5.
Pfizer Age 6M-4Y	30	8	
Moderna	116,239	55,436	60
Moderna Age 6M-5Y	394	145	
Johnson & Johnson	16,818	9,651	7,

Percentage of Population Vaccinated December 12, 2020 - February 27, 2023	3			
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	66.5%	70.6%	74.6%	75.4%
Completely vaccinated	61.8%	65.9%	69.8%	70.6%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	61.3%	65.6%	70.3%	71.4%
Completely vaccinated	56.0%	60.3%	64.9%	66.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	75.3%	78.6%	81.3%	81.6%
Completely vaccinated	71.5%	75.0%	77.7%	77.9%
*Population estimates from 2018 US Census American Community Survey				

Percentage of Population Boosted
December 12, 2020 - February 27, 2023

	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	580,043
Received booster dose	36.9%	60.6%
City of Milwaukee		
*Population	596,886	329,148
Received booster dose	30.8%	55.8%
Milwaukee County Suburbs		
*Population	357,323	250,895
Received booster dose	47.0%	66.8%

^{*}Overall population estimates from 2018 US Census American Community Survey **Booster eligible population is aged 5+ with complete primary vaccination prior to September 30, 2022 for Pfizer or Moderna series, or prior to December 29, 2022 for Johnson & Johnson

Daily COVID-19 doses administered to Milwaukee County residents

Figure 1 shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,767,348 doses (including booster doses) have been administered from December 12, 2020 through February 27, 2023. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

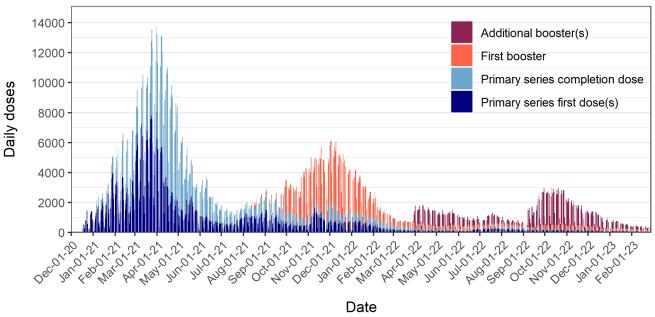


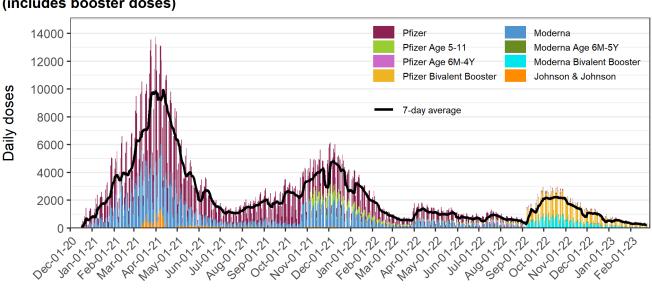
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

Figure 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

Pfizer Moderna 14000 Moderna Age 6M-5Y Pfizer Age 5-11 Pfizer Age 6M-4Y Johnson & Johnson 12000 10000 7-day average Daily doses 8000 6000 4000 2000 Aprolini Mar. 122 Agro 22 May 07:27 H0401.21 Date

Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date

Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

Percentages of Milwaukee County residents partially and completely vaccinated by age group

Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Age 12-15 workers Age 65+ childcare workers 90% 0-4 Percentage of population 80% 5-11 70% 12-15 60% 16-17 50% 18-24 40% 25-39 30% 40-59 20% 60-79 10% 80+ - Aprolina Mayora 00.01.21 Dec. 01.22 , Jul 01:22 5ep.01.22 Oct.01.22 HOY.07.22 Potrol 22 May 01.27 Jun-01-21 AUS-01-27 58201.21 Mar. 01.27 Jul-01-21 22, 01.35 4.35 4.35

Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team

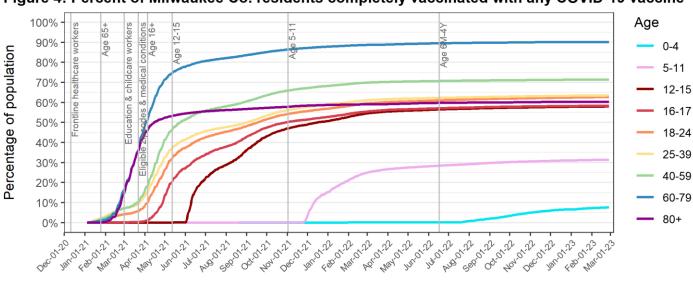


Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Date of first dose

Date of primary vaccination completion dose

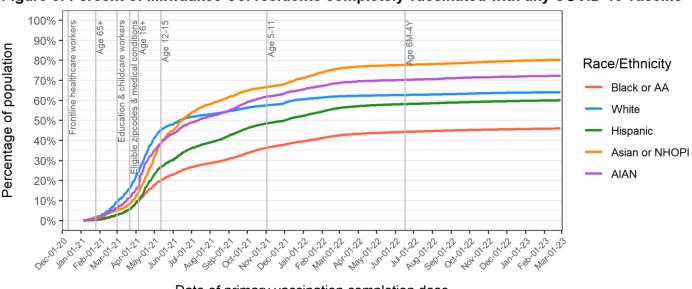
Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

12-15 Education & childcare workers Age 65+ odes & medical conditions Age 16+ 90% Percentage of population 80% Race/Ethnicity 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30% **AIAN** 20% 10% Apr. 01-22 Mayora Muroly 22 Dec 01.22 Jand 22 AQ1.01.21 Jun-01-21 Jul. 01.21 AUDIO 1.27 5ep 01.21 001.01.21 Maro 121 132 132 132 Date of first dose

Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date of primary vaccination completion dose

Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team

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Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

Figure 7 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middleaged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

of first doses per week 90% 80+ 80% 60-79 70% 40-59 60% 25-39 18-24 40% 16-17 12-15 5-11 0-4 60,70,60,60,80,80,80,80,60,

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.

Start day of week

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

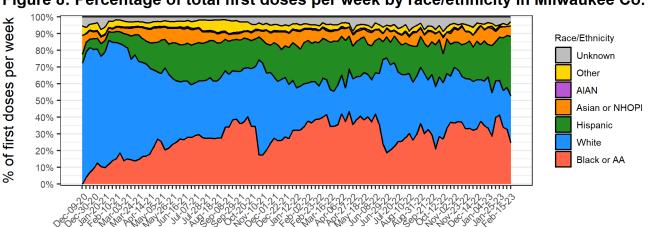


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

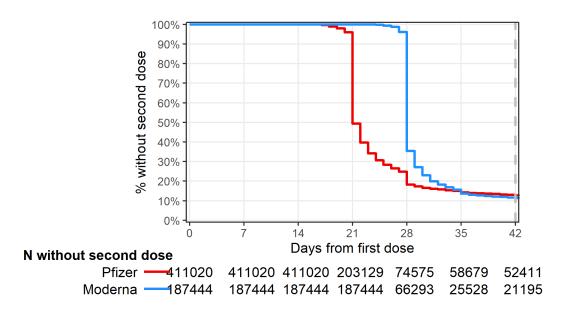
Start day of week

Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

Figure 9 describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to January 15, 2023). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 87.7% of all residents who received their first dose of Pfizer prior to January 15, 2023 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna



Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

Table 1 summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna receipients ¹	*Percent boosted among eligible ¹
First vaccine received		
Pfizer	358,609 / 411,020 (87.2%)	218,268 / 373,068 (58.5%)
Moderna	166,249 / 187,444 (88.7%)	116,226 / 172,351 (67.4%)
Johnson & Johnson		16,818 / 34,624 (48.6%)
Age		
0-4	5,406 / 8,047 (67.2%)	
5-11	25,349 / 32,150 (78.8%)	9,987 / 27,505 (36.3%)
12-15	26,510 / 30,533 (86.8%)	12,278 / 28,060 (43.8%)
16-17	13,248 / 15,178 (87.3%)	6,449 / 14,071 (45.8%)
18-24	48,357 / 58,956 (82.0%)	23,507 / 56,068 (41.9%)
25-39	123,927 / 144,336 (85.9%)	71,703 / 140,689 (51.0%)
40-59	143,868 / 160,190 (89.8%)	103,106 / 164,092 (62.8%)
60-79	118,345 / 127,517 (92.8%)	105,716 / 128,381 (82.3%)
80+	19,848 / 21,557 (92.1%)	18,566 / 21,177 (87.7%)
Sex		
Female	281,876 / 320,157 (88.0%)	192,200 / 308,225 (62.4%)
Male	241,912 / 276,892 (87.4%)	158,566 / 270,624 (58.6%)
Unknown	1,070 / 1,415 (75.6%)	546 / 1,194 (45.7%)
Race/Ethnicity		
Black or AA	97,297 / 119,302 (81.6%)	57,291 / 112,531 (50.9%)
White	287,460 / 313,169 (91.8%)	217,005 / 311,372 (69.7%)
Hispanic	73,228 / 86,943 (84.2%)	40,389 / 82,949 (48.7%)
Asian or NHOPI	29,858 / 34,321 (87.0%)	16,868 / 31,942 (52.8%)
AIAN	2,976 / 3,402 (87.5%)	1,909 / 3,316 (57.6%)
Other	19,581 / 22,585 (86.7%)	11,084 / 21,521 (51.5%)
Unknown	14,458 / 18,742 (77.1%)	6,766 / 16,412 (41.2%)

¹n / N (%)

^{*}Booster eligible population is aged 5+ with complete primary vaccination prior to September 30, 2022 for Pfizer or Moderna series, or prior to December 29, 2022 for Johnson & Johnson

Data Sources & Acknowledgments

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

Contact Information

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